Appl. No. 09/603,184
Amdt. Dated November 20, 2003
Reply to Office Action of August 15, 2003

Attorney Docket No. 81784.0211
Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1   (Original): A noise cancel circuit for removing noise components in a detected radio signal, comprising:

an interpolation circuit for performing interpolation processing on said detected radio signal, wherein

during generation of a pulse noise, a noise portion of said detected radio signal is interpolated by an output signal from said interpolation circuit.

Claim 2   (Original): The noise cancel circuit defined in Claim 1, wherein said interpolation circuit executes spline interpolation.

Claim 3   (Original): The noise cancel circuit defined in Claim 1, further comprising:

a noise detection circuit for detecting the noise portion of said detected radio signal, wherein

the noise portion of said detected radio signal is interpolated by said interpolation circuit according to an output signal from said noise detection circuit.

Claim 4   (Currently Amended):   The noise cancel circuit defined in Claim 3, further comprising:

a first delay circuit for delaying said detected radio signal;

a selection circuit for selecting either the output signal from said interpolation circuit or said the delayed detected radio signal from said first delay circuit, wherein

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said selection circuit is controlled according to the output signal from said noise detection circuit.

Claim 5 (Original): The noise cancel circuit defined in Claim 4, wherein

said interpolation circuit performs interpolation processing and outputs an interpolation signal regardless of presence or absence of noise components.

Claim 6 (Currently Amended): The noise cancel circuit defined in Claim 5, further comprising:

~~a first delay circuit for delaying said detected radio signal and supplying the delayed signal to said selection circuit; and~~

a second delay circuit for delaying said interpolation signal from said interpolation circuit.

Claim 7 (Original): The noise cancel circuit defined in Claim 6, wherein

said second delay circuit is disposed in a processing stage prior to said interpolation circuit.

Claim 8 (Original): The noise cancel circuit defined in Claim 6, wherein

a delay time of said first delay circuit corresponds to a sum of an interpolation processing time of said interpolation circuit and a delay time of said second delay circuit.

Claim 9 (Original): The noise cancel circuit defined in Claim 8, wherein

the delay time of said second delay circuit corresponds to a difference obtained by subtracting the interpolation processing time of said interpolation circuit from a time delay between generation and detection of said pulse noise.

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Claim 10   (New): The noise cancel circuit defined in Claim 1, wherein the radio signal is an audio signal.